

RAD51AP1 antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI11778**Specification**

RAD51AP1 antibody - middle region - Product Information

Application	WB
Primary Accession	O96B01
Other Accession	NM_006479 , NP_006470
Reactivity	Human, Rat, Rabbit, Pig, Horse, Yeast, Dog
Predicted	Human, Rabbit, Pig, Horse, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37kDa kDa

RAD51AP1 antibody - middle region - Additional Information**Gene ID** 10635

Alias Symbol	PIR51
Other Names	
RAD51-associated protein 1, RAD51-interacting protein, R51A1	

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-RAD51AP1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

RAD51AP1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

RAD51AP1 antibody - middle region - Protein Information**Name** RAD51AP1 {ECO:0000303|PubMed:16990250, ECO:0000312|HGNC:HGNC:16956}**Function**

Structure-specific DNA-binding protein involved in DNA repair by promoting RAD51-mediated homologous recombination (PubMed: 17996710, PubMed: 17996711, PubMed: 20871616, PubMed: 25288561, PubMed: 26323318). Acts by stimulating D-Loop formation by RAD51: specifically enhances joint molecule formation through its structure-specific DNA interaction and its interaction with RAD51 (PubMed: 17996710).

target="_blank">17996710, PubMed:17996711). Binds single-stranded DNA (ssDNA), double-stranded DNA (dsDNA) and secondary DNA structures, such as D-loop structures: has a strong preference for branched-DNA structures that are obligatory intermediates during joint molecule formation (PubMed:17996710, PubMed:17996711, PubMed:22375013, PubMed:9396801). Cooperates with WDR48/UAF1 to stimulate RAD51-mediated homologous recombination: both WDR48/UAF1 and RAD51AP1 have coordinated role in DNA-binding during homologous recombination and DNA repair (PubMed:27239033, PubMed:27463890, PubMed:32350107). WDR48/UAF1 and RAD51AP1 also have a coordinated role in DNA-binding to promote USP1-mediated deubiquitination of FANCD2 (PubMed:31253762). Also involved in meiosis by promoting DMC1-mediated homologous meiotic recombination (PubMed:21307306). Key mediator of alternative lengthening of telomeres (ALT) pathway, a homology-directed repair mechanism of telomere elongation that controls proliferation in aggressive cancers, by stimulating homologous recombination (PubMed:31400850). May also bind RNA; additional evidences are however required to confirm RNA-binding in vivo (PubMed:9396801).

Cellular Location

Chromosome. Nucleus Chromosome, telomere. Note=Colocalizes with RAD51 to multiple nuclear foci (By similarity). Colocalizes with DMC1 on meiotic chromatin (By similarity)
{ECO:0000250|UniProtKB:Q8C551}

Tissue Location

Highly expressed in testis and thymus (PubMed:9396801). Lower levels in colon and small intestine (PubMed:9396801). Little or no expression in spleen, prostate, ovary and peripheral blood leukocytes (PubMed:9396801)

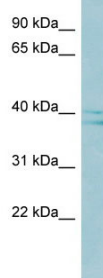
RAD51AP1 antibody - middle region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

RAD51AP1 antibody - middle region - Images





WB Suggested Anti-RAD51AP1 Antibody Titration: 0.2-1 $\mu\text{g/ml}$

ELISA Titer: 1:62500

Positive Control: HT1080 cell lysate

RAD51AP1 antibody - middle region - References

Obama, K., (2008) Clin. Cancer Res. 14 (5), 1333-1339 Reconstitution and Storage: For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.